

# SOFTWARE DEVELOPMENT



## ABOUT THIS DEGREE PROGRAM

### TECH CORE A FOUNDATION IN TECHNOLOGY

This program is anchored with Tech Core, curriculum designed to help you build a foundation of interdisciplinary skills you'll need for today's Internet of Things (IoT) economy. You'll learn relevant skills in operating systems, programming, hardware, connectivity and security – giving you a hands-on foundation in engineering technology, information technology and software and information systems.

### A PROGRAM TO FUEL YOUR FUTURE

With this program, you'll not only be armed with the Tech Core experience, but you'll also be exposed to a variety of concepts that can help guide your specialization choice in Big Data and Analytics, Software Design and Programming, and Web and Mobile Application Development.

### IS THIS PROGRAM FOR YOU?

Interested in a career in software development but not sure where to focus? With this program, you'll be become familiarized with methods for improving software design and application product development to help guide your degree specialization choice.

## CAREER OPPORTUNITIES

Graduates of DeVry's [Software Development degree program](#) may consider, but are not limited to, the following careers:

- Software Application Developer
- Software Systems Developer

## WHAT YOU'LL LEARN

### ESSENTIALS

- Communicate methods and findings
- Collaborate in dynamic work environments
- Solve complex problems
- Analyze numerical data
- Apply appropriate technologies

### TECH CORE

- Produce, secure, operate and troubleshoot small enterprise networks
- Network, secure and deploy digital devices and sensors into the IoT ecosystem
- Solve technical problems using an algorithmic approach and basic programming and coding methods
- Install and configure operating systems using command line interface (CLI)

### PROGRAM

- Design web distributed systems
- Develop applications
- Analyze and design software systems
- Product life cycle management

## QUICK FACTS

**120**  
CREDIT HOURS  
minimum credit hours  
required for graduation

**2 + 8**  
YEARS MONTHS  
minimum length to graduation<sup>1</sup>



### THE SMART WAY TO BE UNDECIDED

With our undecided model, you'll be exposed to three different specializations and be better armed to choose your path.<sup>2</sup>



### WORK WITH IOT TECHNOLOGIES & SYSTEMS

Immerse yourself in the Internet of Things (IoT) world and obtain hands-on experience with IoT, cloud, software and security technologies and systems.



### BE AN ACTIVE PART OF AN INCLUSIVE FUTURE

Customize your curriculum by choosing Diversity, Equity and Inclusion (DE&I) course alternates for your Communication Skills, Humanities and Social Science courses. These options highlight relevant topics to help empower you to promote an inclusive workplace.

<sup>1</sup> Not including breaks. Assumes year-round, full-time enrollment. Additional program information may be found at <https://www.devry.edu/online-programs.html>.

<sup>2</sup> Must declare a specialization by 60 credit hours for bachelor's degree program.

# Software Development

## ESSENTIALS

**51**  
CREDIT HOURS

### COMMUNICATION SKILLS

ENGL112	Composition
ENGL135	Advanced Composition
ENGL216	Technical Writing

**Select one**

SPCH275	Public Speaking
SPCH276	Intercultural Communication ☼

### HUMANITIES

LAS432	Technology, Society, and Culture ☼
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**Select one**

ETHC232	Ethical and Legal Issues in the Professions
ETHC334	Diversity, Equity and Inclusion in the Workplace ☼

### SOCIAL SCIENCES

ECON312	Principles of Economics
SOCS185	Culture and Society ☼

**Select one**

SOCS325	Environmental Sociology
SOCS350	Cultural Diversity in the Professions ☼

### MATHEMATICS AND NATURAL SCIENCES

MATH114	Algebra for College Students
MATH221	Statistics for Decision-Making
MATH234	Discrete Math in Information Technology
PHYS204	Applied Physics with Lab

### PERSONAL AND PROFESSIONAL DEVELOPMENT

CARD405	Career Development
COLL148	Critical Thinking and Problem-Solving

☼ This icon indicates Diversity, Equity & Inclusion Courses

## TECH CORE

**21**  
CREDIT HOURS

### TECH CORE

CEIS101	Introduction to Technology and Information Systems
CEIS106	Introduction to Operating Systems
CEIS110	Introduction to Programming
CEIS114	Introduction to Digital Devices
NETW191	Fundamentals of Information Technology and Networking
NETW211	Fundamentals of Cloud Computing
SEC285	Fundamentals of Information Security

## PROGRAM

**37**  
CREDIT HOURS

### INFORMATION SYSTEMS AND PROGRAMMING

CEIS150	Programming with Objects
CEIS209	Intermediate Programming
CEIS236	Database Systems and Programming Fundamentals
CEIS295	Data Structures and Algorithms
CIS355A	Business Application Programming with Lab

### ANALYSIS AND DESIGN

BIAM110	Introduction to Business Analytics
CEIS310	Process Improvement with Machine Learning
CEIS312	Introduction to Artificial Intelligence

### CAREER PREPARATION

CEIS299	Careers and Technology
CEIS499	Preparation for the Profession
MGMT404	Project Management
TECH460	Senior Project

## SPECIALIZED

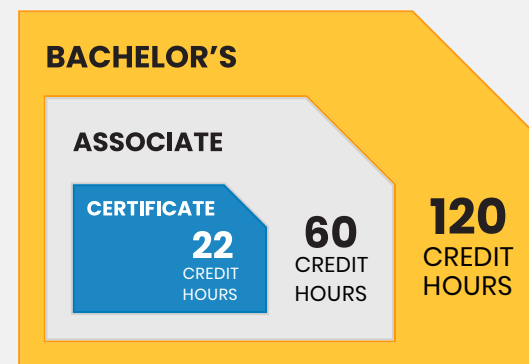
**11-13**  
CREDIT HOURS

Students who have not chosen an area of specialization may begin the program in "Undecided" status; however, they must select a specialization by the time they have earned 60 semester credit hours toward their degree.

Available specializations are:

- Big Data and Analytics
- Software Design and Programming
- Web and Mobile Application Development

### Demonstrate Skills at Every Step



### EMBEDDED PROGRAMS

Acquire an additional two credentials with our unique 3-in-1 design. Courses in our Programming Essentials certificate and Information Technology and Networking associate degree are inserted within our online Software Development degree program. So you can earn a certificate and an associate degree on the way to your bachelor's degree.

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